

THE WAY WE MOVE

# EDMONTON GOODS MOVEMENT STRATEGY

JUNE 2014

TRANSFORMING | **EDMONTON**

BRINGING OUR CITY VISION TO LIFE





# EXECUTIVE SUMMARY

*The Edmonton Goods Movement Strategy is intended to guide transportation, funding and land use decisions to enhance the efficiency and safety of goods movement in the City of Edmonton within a regional context. The strategy supports the City of Edmonton's Corporate Outcomes, aids in achieving corporate strategic targets and is one piece in the implementation of the City's Transportation Master Plan – The Way We Move.*

The ability to deliver goods reliably and on schedule is vital to any business. As the Edmonton region continues to grow quickly, increased demands for moving goods will put pressure on the transportation system. The *Edmonton Goods Movement Strategy* is intended to support this growth by guiding decisions and actions that will enhance the efficiency and safety of goods movement in the City of Edmonton, while supporting the implementation of *The Way We Move*.

The Edmonton region is a major manufacturing, logistics and distribution centre and a hub for the oil and gas industry in Alberta. Edmonton is the largest and most southern node of a northern network of growing, resilient and vibrant communities. It is vital to the economy that commercial transportation moves efficiently through the city and region.

- In Alberta, trucks move over 60% of all freight within the province and are responsible for about \$7 billion or 29% of Alberta's non-pipeline international exports.
- The manufacturing, wholesale trade and transportation & warehousing sectors account for approximately 111,500 jobs and contribute \$10 billion annually to the Edmonton regional economy.
- GDP from the manufacturing and transportation & warehousing sectors will grow by 35% over the next ten years in Edmonton and the region.
- Efficient movement of goods and services is a City of Edmonton Corporate Outcome.
- Goods movement impacts the quality of life of Edmontonians by making consumer products and goods readily available at competitive prices.
- Strategy driven by input from industry, community and regional partners.

The *Edmonton Goods Movement Strategy* identifies new ideas to improve goods movement. It builds on the strengths of our existing initiatives and transportation network.

The strategy also updates what we know about goods movement in Edmonton in light of the many transportation infrastructure changes and growth that have taken place over the years. A 2012 roadside truck survey documented the growth in truck movements over the previous decade, both within the city and between the city and the surrounding region. The survey validated results of previous truck studies, identified new trends and characteristics in goods movement and captured valuable information on the truck driver experience.

The strategy is the first of its kind in Edmonton. It is a synthesis of the perspectives and needs identified by industry, government and community stakeholders. It underscores the importance of goods movement to Edmonton and the region and highlights the need to address challenges and build on opportunities in light of the projected growth in the Edmonton region. Experience in other cities shows that a goods movement strategy, championed both politically and by industry, can be an effective means to coordinate and implement needed improvements.

Driven by results of the *Edmonton Roadside Truck Survey* and input from representatives of industry, community and regional municipalities, seven Strategic Objectives and thirty-five Strategic Actions define the *Edmonton Goods Movement Strategy*. The Strategic Actions build on current initiatives, add new actions that will benefit goods movement, and validate the need for continued policy evaluation and review. The Strategic Objectives and their associated Actions are outlined on the following pages:



# STRATEGIC OBJECTIVES

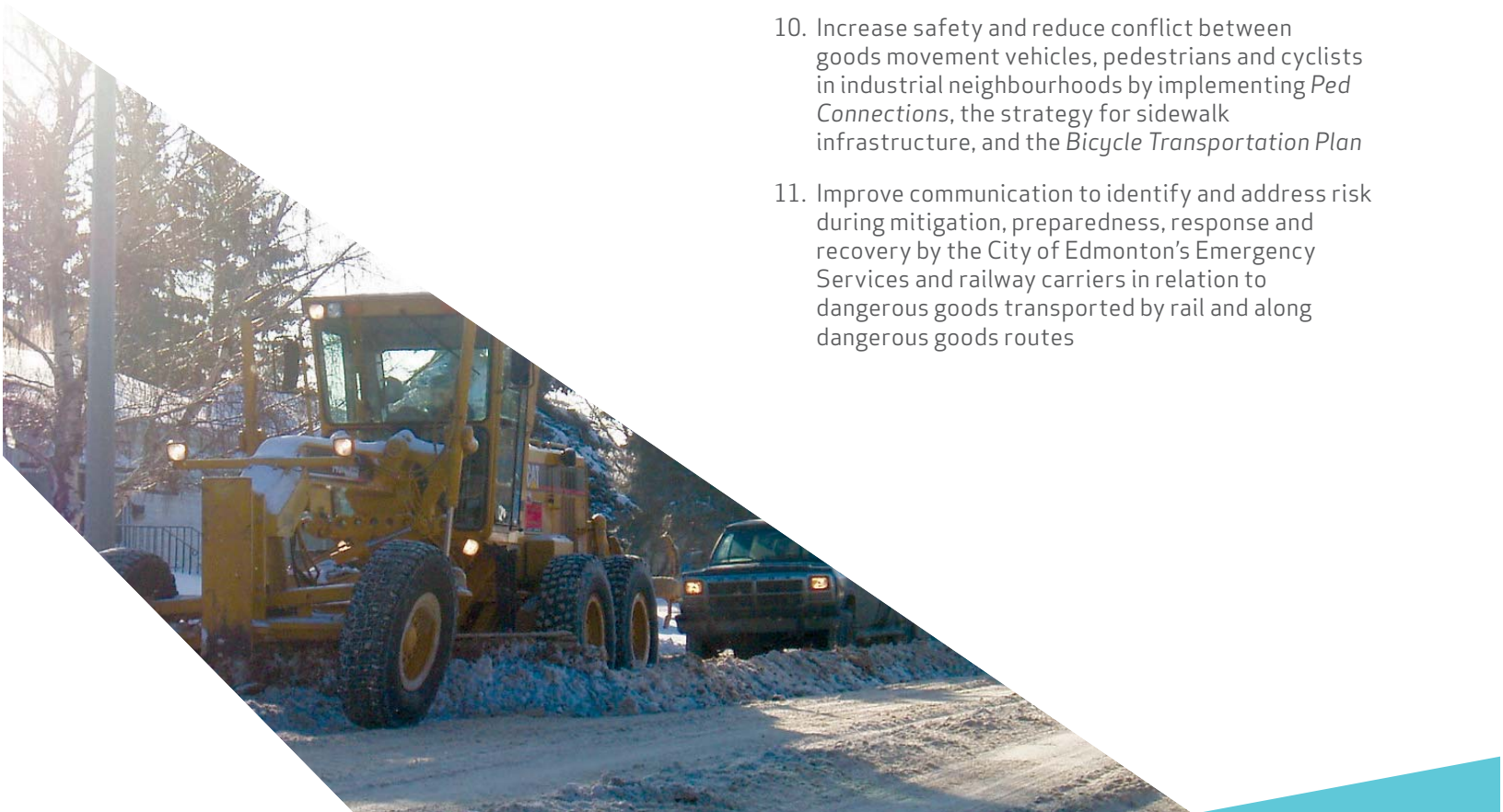
## Objective 1. Improve roadway operations and maintenance practices

1. Identify and prioritize projects to maintain or improve level of service on Key Goods Movement corridors<sup>1</sup> for which the City is responsible
2. Improve efficiency on Key Goods Movement corridors by optimizing traffic operations and signals so as to minimize delays
3. Prioritize winter maintenance along Key Goods Movement corridors
4. Secure annual funding to achieve risk-based infrastructure management system (RIMS) targets for roadway rehabilitation projects on Key Goods Movement corridors and investigate emerging pavement materials and technology as part of the long-term arterial roadway rehabilitation strategy

<sup>1</sup> Refer to Section 1.2 for a definition and listing of facilities.

## Objective 2. Mitigate community, environmental and safety impacts

5. Use the *Involving Edmonton Framework* to involve the community where changes to truck routes and dangerous goods routes are planned adjacent to residential areas
6. Advocate for fuel efficiency and emissions testing, and mechanical inspections on heavy vehicles by the Province
7. Recognize the importance of goods movement, and in particular Key Goods Movement corridors, when implementing the *Complete Streets Guidelines*
8. Implement the *Urban Traffic Noise Policy*, *Low Impact Development Guidelines* and *Wildlife Passage Guidelines* to mitigate the impacts of existing and new truck routes
9. Improve the enforcement of truck route bylaws by implementing a Peace Office Truck Unit, cooperate with Edmonton Police Service to increase commercial vehicle safety inspections, and work with industry to increase compliance with bylaws and regulations
10. Increase safety and reduce conflict between goods movement vehicles, pedestrians and cyclists in industrial neighbourhoods by implementing *Ped Connections*, the strategy for sidewalk infrastructure, and the *Bicycle Transportation Plan*
11. Improve communication to identify and address risk during mitigation, preparedness, response and recovery by the City of Edmonton's Emergency Services and railway carriers in relation to dangerous goods transported by rail and along dangerous goods routes



### Objective 3. Increase transportation network efficiency

12. Review and update the *Edmonton Truck Route Map*, including roads of regional significance, for truck route connectivity, capacity, gaps, network redundancy (to accommodate incidents or emergencies) and relevant regulations in the *City of Edmonton Traffic Bylaw*. Identify and implement improvements with consideration given to pedestrians, cyclists and neighbourhood impacts
13. Identify the need for high load corridors. Build high load considerations into land use and transportation planning that is coordinated with regional high load corridor planning initiatives
14. Working with the Province, prioritize funding for missing connections from industrial areas to Anthony Henday Drive and for upgrades to existing connections to accommodate growth
15. Working with the Province, complete ongoing level of service reviews and upgrades to Anthony Henday Drive to ensure a high service level for goods movement is provided and maintained
16. Implement the *Yellowhead Trail Strategic Plan* with continued monitoring of operations and staged implementation of improvements as outlined in the *Yellowhead Trail Strategic Plan*
17. Plan, design and construct grade separations at high priority railway crossing locations, in cooperation with the Province and Federal governments
18. Implement the *Capital City Downtown Plan Policy 14.5* concerning efficient service delivery which calls for “establishing design standards for loading areas and waste storage and pickup facilities in the Downtown and implementing designs for these downtown alleys to carefully integrate pedestrian-oriented functions with vehicle functions.” Implement Policy 14.6 to “provide a safe, cost effective and efficient truck route system that facilitates the movement of goods and services to, from and within the Downtown and through the region”

### Objective 4. Improve network planning and forecasting

19. Working with the Province and the Capital Region Board, improve roads of regional significance and Key Goods Movement Corridors
20. Implement a program for goods movement data collection, taking consideration of the use of electronic data-gathering technologies and industry GPS data
21. Implement the *Industrial Land Strategy* and support efforts to cluster similar industrial land uses at the *Industrial Area Structure Plan* level, in support of *The Way We Prosper Plan*
22. Working with businesses and property owners, facilitate the planning, development and redevelopment of industrial properties as per the *City of Edmonton Industrial Land Use Strategy Key Element 2B* and consider impacts to residential areas during redevelopment
23. Develop a truck route map for establishing areas, including future industrial developments, to facilitate integrated transportation and land use planning
24. Complete a functional planning study for the 75 Street/Wayne Gretzky Drive corridor between Whitemud Drive and Yellowhead Trail
25. Together with industry and the Province, investigate the feasibility of building consolidation centres (facilities where all freight destined to or originating from an urban area is consolidated for more efficient delivery) at strategic locations to limit truck movements within the city

### Objective 5. Improve regional and regulatory coordination, communication and advocacy

26. Harmonize truck route maps and create a central permit application system in cooperation with Alberta Transportation and neighbouring regional municipalities to improve regional goods movement
27. Create a Goods Movement Task Force comprised of representatives from the City of Edmonton, provincial and regional partners, Port Alberta, industry, rail and air authorities and communities to implement improvements for goods movement
28. In partnership with others, create public education initiatives, including a social marketing campaign, that promote safe driving habits when sharing the

road with trucks

### Objective 6. Improve on-road communication and way-finding for truck drivers

29. Implement a regional traveller information system in cooperation with provincial and regional partners that supports industry needs and includes web-based truck route mapping, as well as on-road and on-line information with links to incident and construction notifications
30. Develop a transportation systems management strategy to coordinate the delivery of technology-based tools including Intelligent Transportation Systems in support of Key Goods Movement corridors with regional considerations
31. Review and improve truck route and height restriction sign placement to ensure sufficient time allowance for drivers to make alternate route choices
32. Collaborate with leaders in industry and academia to identify an on-road electronic communication project alerting truck drivers of road restrictions





or closures

### **Objective 7. Explore funding mechanisms to implement network improvements**

33. Review the Arterial Roadway Assessment processes for industrial areas to explore ways of accelerating the building of new roads in growth industrial areas
34. Monitor funding programs and new opportunities from other orders of government that focus on improving goods movement as part of economic development, trade and commerce and explore public private partnerships for major transportation infrastructure projects
35. Continue to coordinate with the Capital Region Board and Alberta Transportation on regional

infrastructure spending and priorities

The development of the *Edmonton Goods Movement Strategy* is a first step that establishes a framework for subsequent actions and plans. The next step, implementation of the strategy, will require collaboration between the City, public and private sector partners, and discussions with affected communities. Experience elsewhere demonstrates that a goods movement task force comprised of these partners is the appropriate vehicle to enable collaboration and to move forward with creating real and positive change. The benefits that will flow from efficient and safe goods movement in Edmonton will have positive impacts for business, community and our regional partners.



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# 1.0 INTRODUCTION

## Why a Goods Movement Strategy

The Edmonton region is a major manufacturing, logistics and distribution centre and a hub for the oil and gas industry in Alberta. Edmonton is the largest and most southern node of a northern network of growing, resilient and vibrant communities. It is vital to the economy that commercial transportation moves efficiently through the city and region. Efficiency means the provision of a road network that connects all major goods-generating activity centres and inter-modal terminals with each other and with the major highway system directly, safely and with minimal delays, minimizing truck intrusions through sensitive areas.

Goods movement is a significant contributor to the local, regional and provincial economies:

- In Alberta, trucks move over 60% of all freight within the province and are responsible for about \$7 billion or 29% of Alberta's non-pipeline international exports.<sup>2</sup>
- The manufacturing, wholesale trade and transportation & warehousing sectors account for 111,500 jobs and contribute \$10 billion annually to the economy of the Edmonton Census Metropolitan Area (CMA).<sup>3</sup>
- Gross Domestic Product (GDP) in the manufacturing and transportation & warehousing sectors will grow by 35% over the next ten years.<sup>4</sup>

The *Edmonton Goods Movement Strategy* is one piece in the implementation of *The Way We Move* - the City of Edmonton's Transportation Master Plan. The *Edmonton Goods Movement Strategy* is intended to guide transportation, funding and land use decision-making to enhance the efficiency and safety of goods movement in the City of Edmonton within a regional context. The strategy also supports the *City of Edmonton's Corporate Outcomes* and its strategic targets for goods movement. The strategy serves two purposes:

1. To update the understanding of goods movement in Edmonton given the many transportation infrastructure changes and growth that have occurred.
2. To identify the opportunities and challenges in goods movement in Edmonton and present solutions for improvement and build on the strengths of current initiatives and transportation network.

All Edmontonians are touched by the movement of goods in the city – from businesses owners to consumers. Efficient goods movement helps to manage operating costs, thereby ensuring that consumer products and goods are available to residents at reasonable prices and that businesses can operate competitively. Goods are primarily moved through the city by trucks and people travelling by any means will come in contact with trucks. Improving the movement of goods will have a positive impact on truck drivers as well as improving the transportation experience for all users. Efficient goods movement operations also will reduce fuel consumption and emissions.

2 Transportation and international logistics - Industry Sector Profile. Alberta Enterprise and Advanced Education, Government of Alberta. <http://albertacanada.com/business/industries/transportation-and-logistics.aspx>

3 Calculated from the Economic Outlook Spring 2013 dataset for 2012, Office of the Chief Economist, City of Edmonton

4 *ibid.*



## 1.1 Goods Movement and Policy

*The Way We Move* is guided by and contributes to the achievement of the City's Strategic Plan - *The Way Ahead*, established by City Council in 2008. It provides the City's vision for Edmonton in 2040 and establishes six 10-year strategic goals to provide a clear focus for the future. The plan forms the foundation for the work of the City. The Edmonton Goods Movement Strategy directly supports the City of Edmonton's Corporate Outcome to move goods and services efficiently.

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Goods and services move efficiently

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*The Way Ahead Corporate Outcome*

*The Way We Move* has seven Transportation Strategic Goals that define a vision for the transportation system. The efficient movement of goods and services supports three of these goals: Transportation and Land Use Integration, Access and Mobility and Economic Vitality. The Transportation Master Plan directs that roadway improvements focus on efficient goods movement. An efficient network for goods and services movements incorporates integrated multimodal and regional approaches to support commercial transportation needs.

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Provide a safe, cost effective and efficient truck route system that facilitates the movement of goods and services to, from and within the Downtown and through the region.

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*Capital City Downtown Plan Policy 14.6*

Goods movement is important for supporting and fostering the economic vitality and the competitive advantage of Edmonton and surrounding region. We know that access to a direct, well-maintained, reliable and safe transportation system is one of the important factors that businesses consider when making the decision to expand or relocate their operations. An efficient system is cost-effective in terms of time, energy consumption and infrastructure needs. Safe, efficient and effective goods movement is supported by *The Way We Grow* – Edmonton's Municipal Development Plan which emphasizes the relationship between land use planning and goods movement.

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Build infrastructure and provide services to support land development, goods movement and ongoing business operations.

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*The Way We Grow*  
*Supporting Prosperity Policy 6.3.1.7*

*The Way We Move* identifies the City's commitment to support efficient goods movement in order to enable economic development and support the competitiveness of businesses within the City of Edmonton. Transportation of goods throughout the city is largely carried out by trucks and is critical for an efficient and productive economy. The objective and actions outlined in Section 8.1 (Appendix A) of the Transportation Master Plan provide the high level framework for a safe and efficient goods movement network.

The Region's transportation system must recognize and respond to the complex and vast demands for transport and movement of raw and finished goods within the region as well as into and out of the region.

The demands for movement of goods emanate from significant areas of economic activity that include Alberta's Industrial Heartland, Leduc County's Nisku and other industrial areas, Parkland county's Acheson Industrial area, Port Alberta, Edmonton International Airport, Strathcona County's petrochemical sites and Edmonton's central, southeast, north and northwest industrial/commercial areas.

Serving these major areas of economic activity with appropriate transportation infrastructure requires the provision of adequate routes for movement of heavy vehicles and adequate provision of access off these routes to allow efficient access to the industrial and commercial sites.

**Capital Region Board Integrated Regional  
Transportation Master Plan on Goods Movement**

In addition to Strategic Objective 8.1, several other Strategic Objectives identified in *The Way We Move* indirectly support improvements to goods movement and mitigation of the related impacts. These are listed in Appendix B.

From a regional perspective, the *Edmonton Goods Movement Strategy* is aligned with the Capital Region Board's *Integrated Regional Transportation Master Plan (IRTMP)*<sup>5</sup> which identifies long-term integrated transportation improvements for the Region. The IRTMP lists a number of roadway investment priorities in the City of Edmonton focused on improvements to goods movement routes, the economic benefits of which would impact the entire Edmonton Region.

5 Capital Region Board, *Capital Region Board – Integrated Regional Transportation Master Plan*, September 2010.



## 1.2 Scope of This Strategy

*The Way We Move* defines goods movement as the “transportation of goods (freight or commodities) by road, rail or air.”<sup>6</sup> The City’s responsibility to commercial transportation is to provide infrastructure that facilitates the movement of goods and services with a focus on road-based goods movement. Although the City has no direct control over railways and air transport, these modes are an important aspect of a multimodal transportation network and the City has responsibility for land use planning, zoning and road access in relation to these facilities.

It is also important to note that although the *Edmonton Goods Movement Strategy* is directed to roads that are under the City’s jurisdiction, it does recognize that goods may be moved on Provincial highways and may originate in or be destined to the regions surrounding the City, or beyond. Where appropriate, **the Strategy recognizes the potential need for other jurisdictions or levels of government to be involved.**

Throughout the strategy, reference will be made to Key Goods Movement corridors and truck routes. As referenced in the Transportation Master Plan, Key Goods Movement corridors consist of:

- The Inner Ring Road (Yellowhead Trail, 170 Street, 75 Street<sup>7</sup> /Wayne Gretzky Drive and Whitemud Drive)
- Highway connectors
- Anthony Henday Drive (Provincial responsibility)
- Roads that are designated truck routes and provide linkages from the Inner Ring Road and highway connectors to industrial areas and intermodal facilities
- Gateway Boulevard and Calgary Trail

<sup>6</sup> The definition of “goods movement” includes the movement of commercial or service vehicles — for example, for the repair of household appliances. While recognizing their importance, in accordance with the Transportation and Infrastructure Committee’s interest, this *Strategy* focuses on the movement of goods.

<sup>7</sup> Note that currently trucks must detour via 50 Street for portions of 75 Street.

Truck routes are comprised of the remaining designated truck route network in the City of Edmonton not captured in the above description, as well as areas of unrestricted truck movement within industrial areas. Both heavy and light vehicles transport goods on Edmonton roadways. In Edmonton heavy vehicles are defined as vehicles having a gross vehicle weight greater than 8,000 kilograms and must stay on truck routes while travelling within Edmonton’s city limits.<sup>8</sup> Trucks less than this weight are free to travel unrestricted on all parts of the roadway network.

**The *Edmonton Goods Movement Strategy* should be seen as an enabling policy framework within which subsequent actions can be detailed, prioritized, funded and implemented.** While doing so, the strategy recognizes the importance of striking a balance between transportation infrastructure needs and the impact on communities. **The theme of balancing community and industry needs in all aspects of goods movement is reflected throughout the *Edmonton Goods Movement Strategy*.**

The Strategy recognizes the implications to the Edmonton region as there are a number of roadways under the control of the City that are of regional significance and which serve the regional population. These are the Inner Ring Road and the highway connectors feeding the Inner Ring Road. In addition, the Province of Alberta has jurisdiction over certain roadways of significance within the City of Edmonton including Anthony Henday Drive and the connectors between Anthony Henday Drive and the highways within the Edmonton region.

<sup>8</sup> Bylaw 5590 makes provisions for heavy vehicles to travel off of truck routes in many instances for example when making deliveries to customers on local streets.



## 1.3 Importance of Efficient Goods Movement

From the perspective of businesses, efficient and reliable goods movement is essential to maintaining an economically viable operation that brings jobs and income to a region. Many factors influence where a business chooses to locate, including the availability of a skilled and experienced labour force, an adequate supply of serviced and appropriately zoned land, and proximity to suppliers and markets. Ultimately, however, these factors must be expressed as monetary costs that impact the employer's operations; and this is true for all of type of businesses in all economic sectors. From the perspective of the actual *movement* of goods, 'time equals money' – meaning that there are real and direct costs associated with delays in moving goods from one point to another. These costs include vehicle operations (fuel, maintenance, etc.) and the drivers' salaries, but also can include financial penalties if goods are not delivered on time.<sup>9</sup> For this reason, shippers and carriers look for:

- Directness (the shortest practical route between stops)
- Avoidance of bottlenecks (congestion-free intersections and routes)
- Redundancy (the ability to divert quickly to another route – or even another mode – in case one route is blocked)

<sup>9</sup> There are also broader and real societal costs associated with delays: e.g., the delivery of medical products to hospitals or legal documents to business operations.

Moreover, ensuring smooth and efficient operations for trucks also can benefit other road users, including transit vehicles.

The City of Edmonton recognizes that goods movement is an important element of Edmonton's economic competitiveness and that of the Edmonton region. According to the City's economic development plan *The Way We Prosper*, "infrastructure plays a significant role in the City's ability to attract, retain and support business...in this regard, Edmonton benefits from the ability to move goods and people internally as well as from its connections to external markets. There is a strong business case for businesses to locate and invest in Edmonton due to access to Canada's two major rail carriers (CN and CP), the city's position at the crossroads of the Yellowhead Highway (the northern Trans-Canada) and Queen Elizabeth II Highway (part of the CANAMEX corridor linking Canada, the United States and Mexico), the rapidly expanding international airport and intermodal hub, and connections to Canada's major oil and gas pipelines."<sup>10</sup>

The City of Edmonton is committed to maintaining or improving the level of service for transit and goods and services movement by giving priority to roadway projects that enhance these movements. Adding roadway capacity to serve commuter traffic will not be a priority for major road projects. The focus of improvements for commuter traffic will be on optimizing the existing roadway operations.

<sup>10</sup> *The Way We Prosper: The City of Edmonton's Economic Development Plan, A New Direction for Economic Development*, 2013.



## 1.4 The Need for a Goods Movement Strategy

In April 2012, at a meeting of the Transportation and Infrastructure Committee of Edmonton's City Council, a number of questions were raised by councilors in relation to goods movement. They expressed the need for a better understanding of truck movements in the city, in particular with regards to volumes, origins and destinations and routes taken for goods movement. This need was identified in light of the many infrastructure changes that had occurred over the past decade in Edmonton, including construction of Anthony Henday Drive. There was also a need to investigate possible changes in the movement of truck traffic between the city and the region, and the types of loads carried. To that end, direction was given to update the City's 1996 *Truck Route Study* in an effort to better understand the changes in the characteristics of goods movement in Edmonton. The *Edmonton Goods Movement Strategy* responds to this need and also supports the implementation of *The Way We Move*.

**The Strategy was driven by a comprehensive stakeholder engagement.** The *Goods Movement Strategy* stakeholder consultation process gathered the perspectives and expertise from industry, community and regional municipalities on the opportunities and challenges with goods movement in Edmonton. Both the consultation and the *Strategy* were informed by the *Edmonton Roadside Truck Survey*, which surveyed nearly 2,300 trucks regarding various characteristics of their movements in Edmonton in the fall of 2012. Both are summarized in this report and detailed reports are available upon request.



## 1.5 Organization of this Document

**Section 2** provides an overview of the importance of goods movement to Edmonton, the region and the Province of Alberta in relation to employment, the economy and expected growth.

**Section 3** identifies the profile and characteristics of goods movement in Edmonton and the region based on the findings of the 2012 Edmonton Roadside Truck Survey.

**Section 4** outlines the opportunities and challenges identified through the *Goods Movement Strategy* consultation process.

**Section 5** provides the details around the seven Strategic Goals and the related Strategic Actions

**Section 6** identifies the formation of a goods movement task force to carry out the implementation of the *Edmonton Goods Movement Strategy*.

The **Glossary** provides definitions for terms used throughout the *Strategy* document.

**Appendix A and B** provide reference to Strategic Objectives and Actions in *The Way We Move* that support goods movement.

**Appendix C** provides a selection of examples of goods movement strategies or actions that have been implemented or are planned in other jurisdictions.





## 2.0 KEY TRENDS IMPACTING GOODS MOVEMENT

The transportation and logistics industry is an important contributor to Alberta's competitive advantage. According to the Government of Alberta, trucks are "moving over 60% of all freight within the province" and are responsible for "about \$7 billion or 29% of Alberta's non-pipeline international exports."<sup>11</sup> In addition, the transportation and warehousing sector alone contributes \$10.2 billion annually to the Alberta economy and employs more than 98,000 people.<sup>12</sup> As Alberta's economy grows it has a direct impact on transportation and logistics. Between 1991 and 2011, Alberta's gross domestic product (GDP) grew at an average annual rate of 3.4%<sup>13</sup> while over the past 10 years alone, the registration of heavy trucks in the province increased by 46%.<sup>14</sup> GDP trends in the Edmonton Census Metropolitan Area (CMA) followed those of the province with an overall GDP growth of nearly 20% between 2005 and 2012.<sup>15</sup>

Goods-generating industries are also important employers in the Edmonton CMA. In 2012, the manufacturing, wholesale trade and transportation & warehousing sectors accounted for approximately 111,500 jobs in the Edmonton CMA and contributed \$10 billion annually to the Edmonton regional economy.<sup>16</sup> Over the next decade, employment in these sectors is forecasted to grow between 2% to 3% per year.<sup>17</sup> GDP growth in manufacturing and transportation & warehousing is also expected to continue to grow steadily at an annual rate of 3%, amounting to an overall increase in these sectors of 35% over the next 10 years.<sup>18</sup> This is significantly faster than the expected growth in the region's population and jobs over the same period, as is described below.

11 *Transportation and international logistics - Industry Sector Profile*. Alberta Enterprise and Advanced Education, Government of Alberta. <http://albertacanada.com/business/industries/transportation-and-logistics.aspx>

12 *ibid.*

13 *Alberta Economic Quick Facts*, October 2012. Alberta Enterprise and Advanced Education, Government of Alberta.

14 *Transportation and international logistics - Industry Sector Profile*. Alberta Enterprise and Advanced Education, Government of Alberta. <http://albertacanada.com/business/industries/transportation-and-logistics.aspx>

15 Calculated from the Economic Outlook Spring 2013 dataset, Office of the Chief Economist, City of Edmonton

16 *ibid.*

17 *ibid.*

18 *ibid.*

## 2.1 Industrial Land Forecast

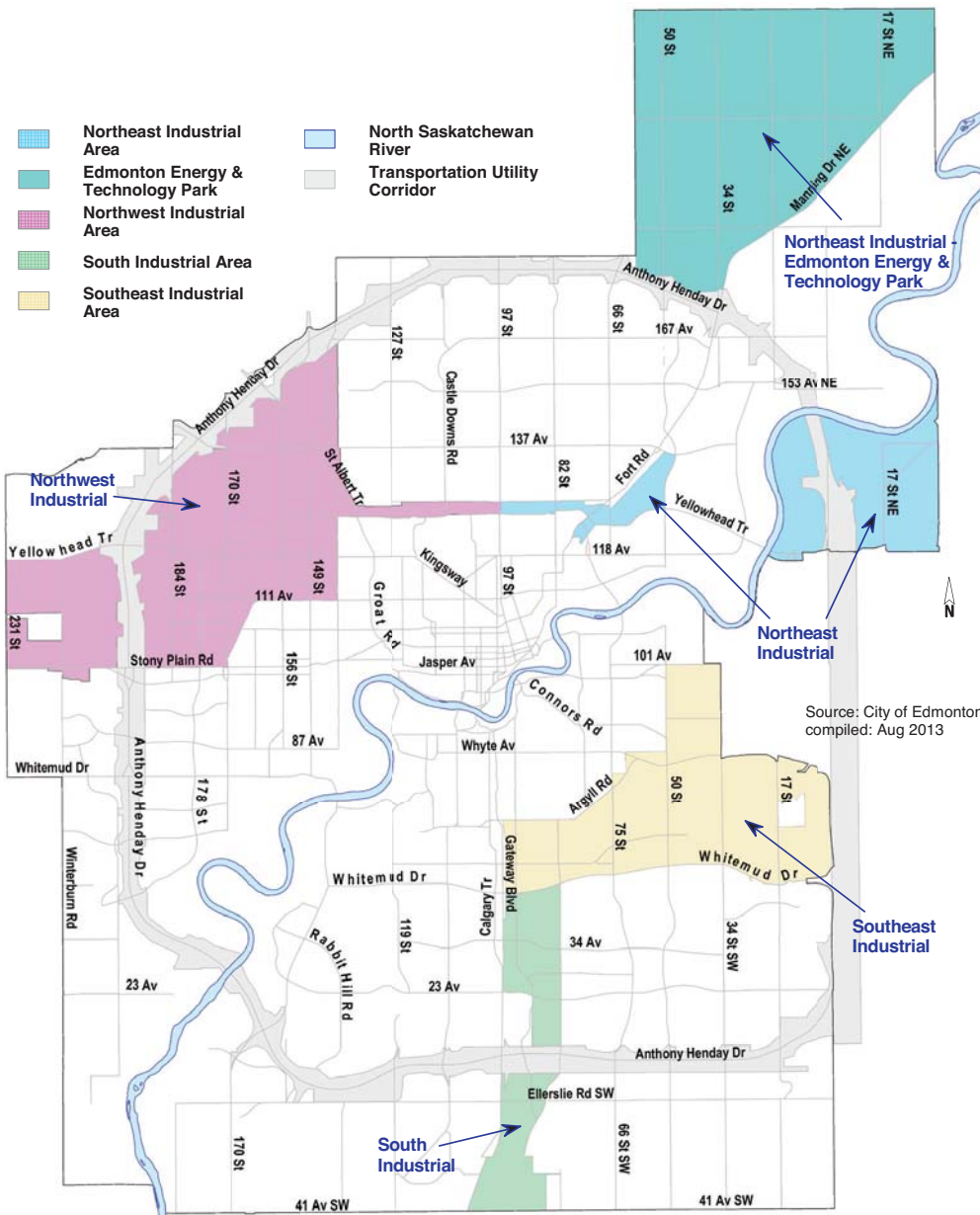
Industrial land requirements are also forecasted to increase between 2012 and 2025. Over 1,300 hectares of new industrial lands will be needed with about 540 hectares and 430 hectares required for the Northwest and Southeast sectors of the city respectively.<sup>19</sup>

<sup>19</sup> Demand Forecasts of Industrial Lands 2012–2025, Office of the Chief Economist, City of Edmonton

A full 75% of all new industrial lands will be required in these two sectors to satisfy the demand there.<sup>20</sup> Figure 1 illustrates the locations of the industrial zones in Edmonton.

<sup>20</sup> *ibid.*

Figure 1: City of Edmonton's Industrial Areas  
Source: Vacant Industrial Land Supply – Edmonton's Industrial Land Strategy, City of Edmonton, July 2012



## 2.2 Population and Employment

The City of Edmonton is forecasted to see steady population growth over the next 10 years from an estimated 836,000 in 2013 to 1 million by 2023, a 22% increase in population. Comparable population growth is forecasted for the Edmonton region. Employment growth will keep pace with population growth increasing by 25% in the City of Edmonton and 22% in the

Edmonton CMA over the next decade. The impact to goods movement of these trends will likely mean **an increase in truck movements between the city and the region as new economic development takes place outside the City's boundaries**; and, as noted above, goods-generating industries will grow even faster than overall population and jobs.

Figure 2: Forecasted Edmonton Population, 2013–2023

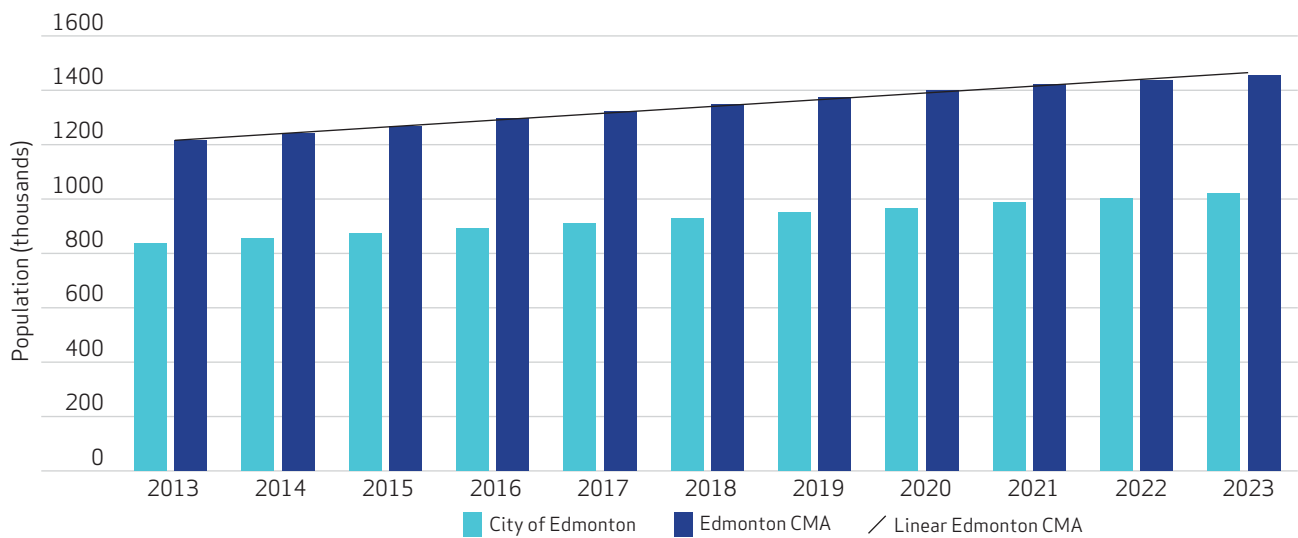
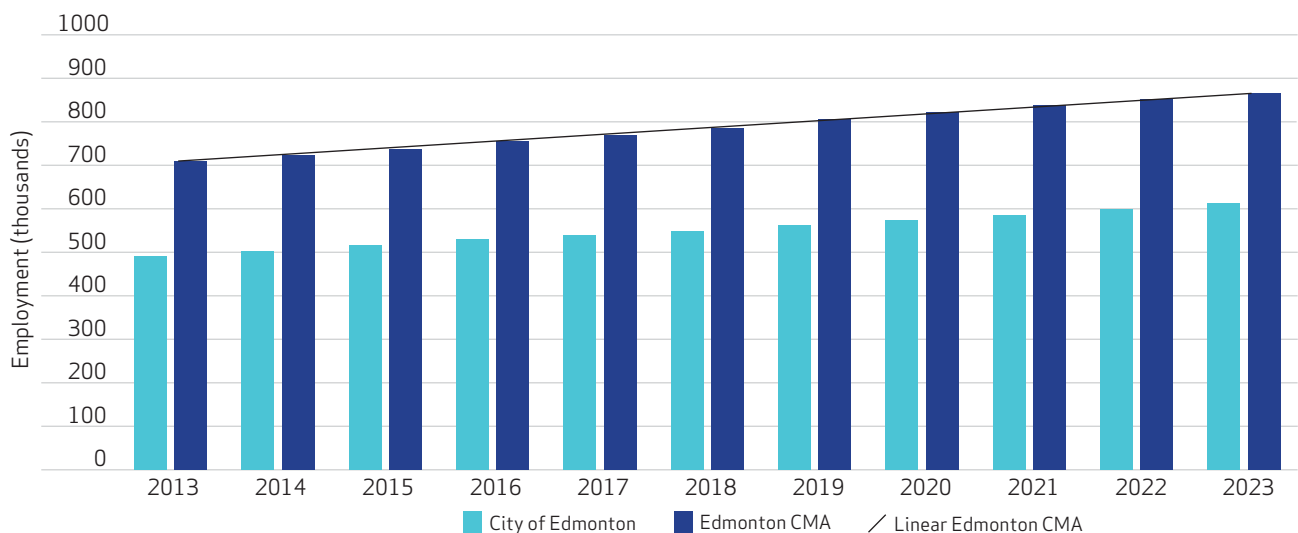


Figure 3: Forecasted Edmonton Employment, 2013–2023





## 3.0 PROFILE OF GOODS MOVEMENT

### 3.1 Goods Movement Generators

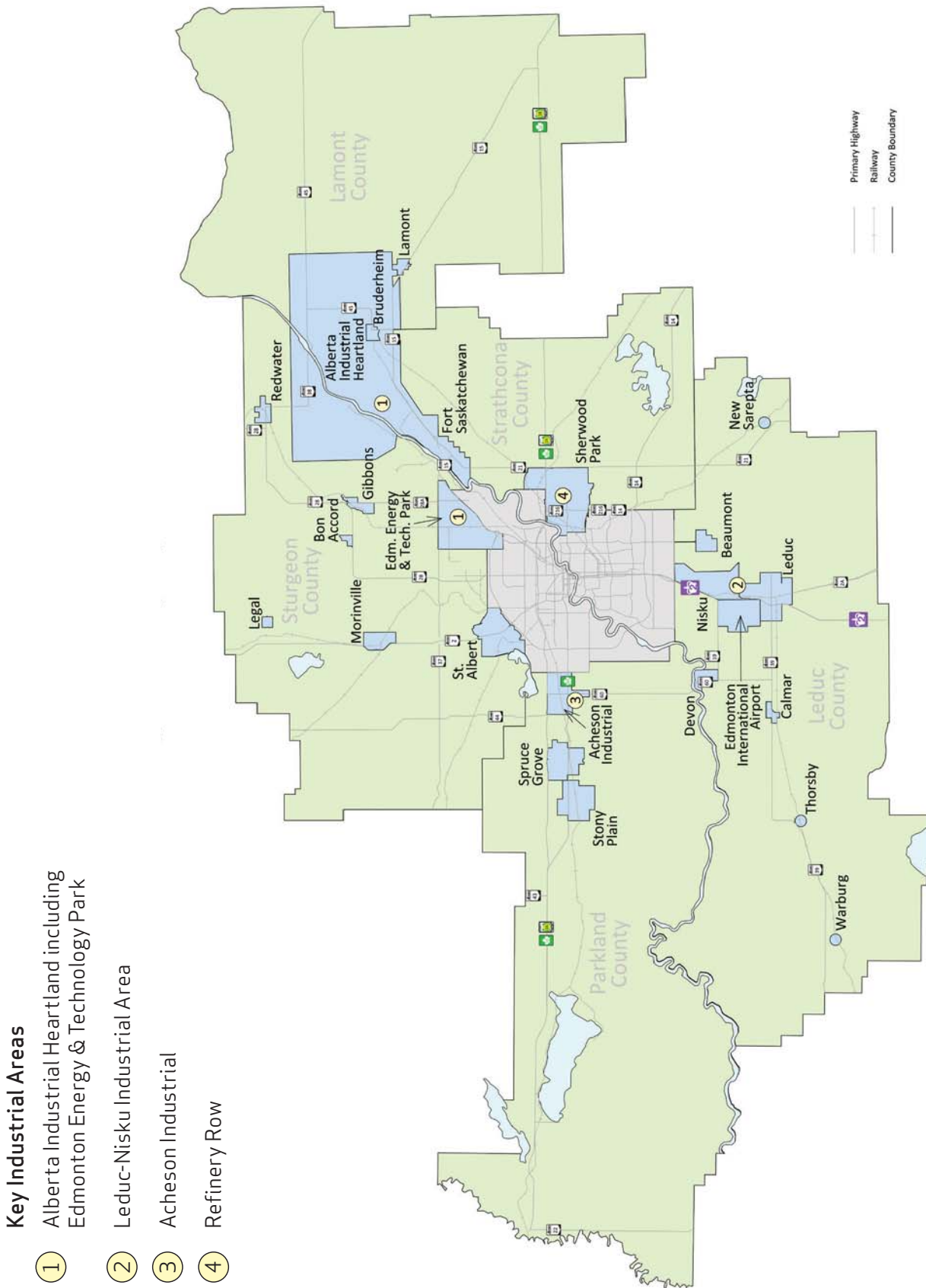
There are a number of major generators in Edmonton and the surrounding region that contribute to the demand for goods movement. These include the industrial parks, the Edmonton International Airport and major industrial centres such as the Alberta Industrial Heartland and the Leduc-Nisku Business Park - Canada's largest and North America's second largest energy park. In addition, there are two intermodal facilities in Edmonton, the CN yard in the Northwest sector of the city and the CP intermodal operations, currently located at 39 Avenue with a plan to move all or part of the operations to a new location at 41 Avenue Southwest and Queen Elizabeth II Highway.

These key generators are located within close proximity to major Key Goods Movement corridors such as Anthony Henday Drive, Yellowhead Trail, and Queen Elizabeth II Highway as well as CP and CN rail lines and Canada's major oil and gas pipelines.

Figure 4 illustrates the locations of the regional employment centres including key industrial areas.



Figure 4: Edmonton Region Employment Areas



## 3.2 Characteristics of Goods Movement

To better understand the movement of goods in Edmonton and provide input to the *Edmonton Goods Movement Strategy*, a truck survey was commissioned by the City in the fall of 2012.<sup>21</sup> Information collected from truck drivers during the survey included:

- Trip origins and destinations
- Routes taken while travelling in the city and the regional highways
- Commodities carried
- Experiences while travelling on the Edmonton transportation network

Goods movement is pervasive, serving residential, commercial and industrial areas alike. However, it is important to note that the survey focused on large trucks moving to and from the City's major industrial areas, thereby providing a profile of the key industrial activity. A more detailed goods movement survey of the smaller operations that serve the City's communities and offices was not feasible at this time.

The *Edmonton Roadside Truck Survey Report* provides a detailed overview of the findings of the survey. The data presented here is extracted from the truck survey report.

<sup>21</sup> City of Edmonton Transportation Services, *Edmonton Roadside Truck Survey Final Report*, 2013.

Figure 5: Truck Types

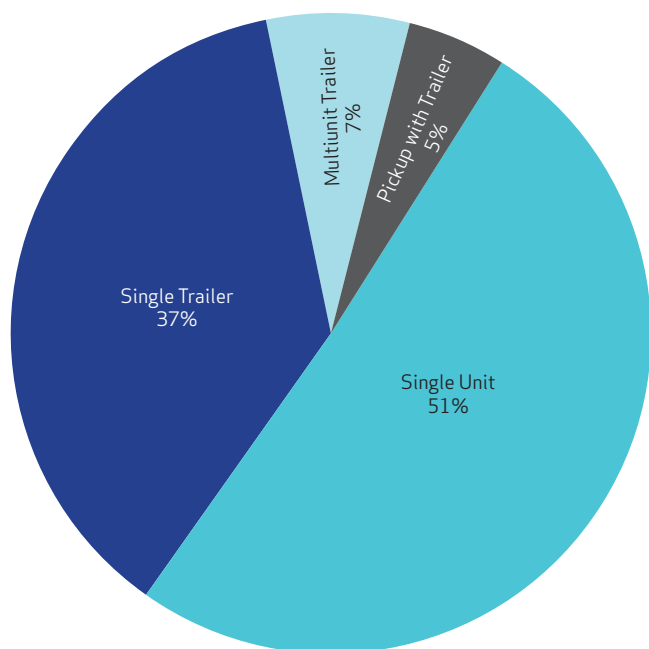


Figure 5 indicates that 56% of trucks travelling on Edmonton roads consist of single-unit trucks and a small number of pickups with trailers. The remaining 44% include the larger tractor-trailers with either single or multiple trailers.

Data was also aggregated for all truck trips in and around Edmonton with the most predominant truck movement patterns shown visually in Figure 6. Truck origin and destination results show that within the city, the origin-destination pair with the highest movement of trucks occurs between the Northwest and Southeast quadrants. This is consistent with the results of the last commodity flow survey conducted in 2001<sup>22</sup> as well as the 1996 Truck Study. This also aligns with the land use characteristics of these two quadrants as they have high industrial land use. Also significant was truck movements between the Northwest and Northeast as well as the Northeast and Southeast quadrants of the city.

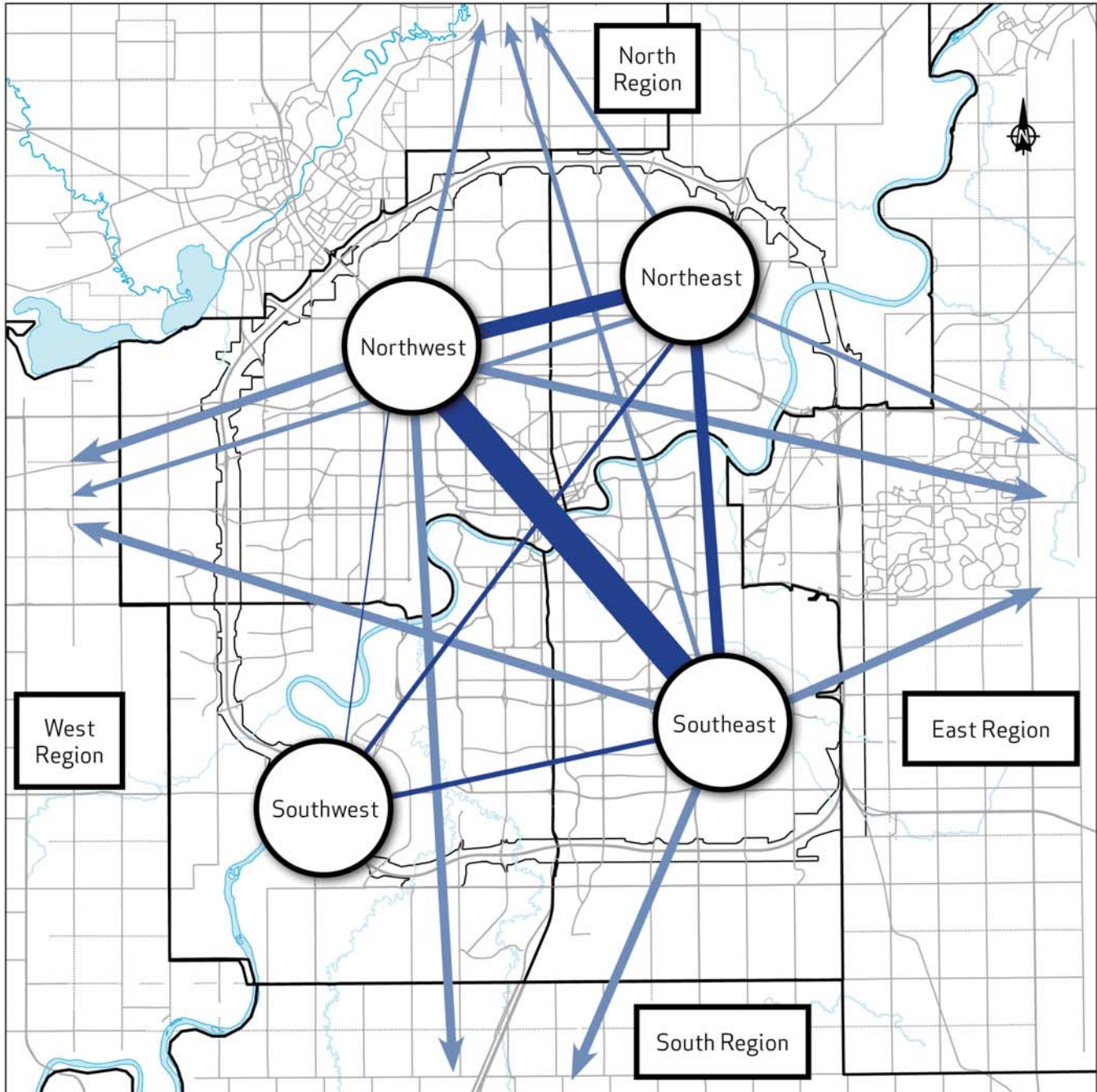
### City-Region Truck Movements

Between the City and the Edmonton region the highest volume of trips were generated to and from the East, West and South Regions. The substantial movement of goods to and from the South Region is consistent with previous studies while the growth of movement to and from the West and East Regions is a new development. Overall, the most significant origins and destinations were between Edmonton and Sherwood Park, St. Albert, Spruce Grove, Stony Plain, Acheson, Nisku, Leduc and Fort Saskatchewan. Outside of the region, important origins and destinations were Calgary, Fort McMurray and Wetaskiwin. Outside of Alberta, a frequent origin-destination was Saskatoon.

<sup>22</sup> International Results Group, *City of Edmonton Commodity Flow Survey*, 2002.



Figure 6: Daily Truck Trip Patterns



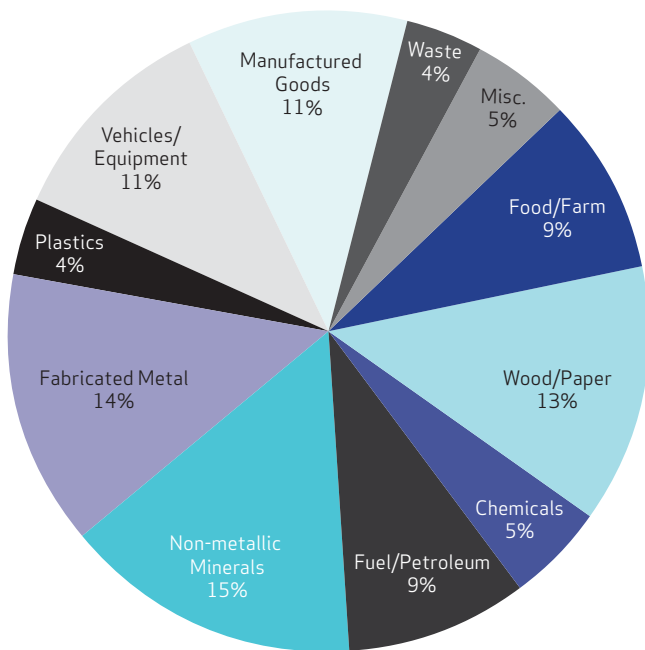
Legend		
City	Region	Daily Trips
		1,000 - 2,500
		2,501 - 10,000
		10,001 +



To better understand the routes that were used to complete the trips, drivers were asked specifically whether they used any of the Inner Ring Road corridors, Anthony Henday Drive and/or surrounding provincial highways to complete their journey that day. Drivers were permitted to select one or more of these roads on the survey. For the Inner Ring Road corridors, the results show that Yellowhead Trail was used the most at 67% while Anthony Henday Drive was nearly as popular as Yellowhead Trail with 60% of drivers indicating use of Anthony Henday Drive for their trips that day. Also relevant, by comparison 75 Street was used the least, at 21%. This is significantly lower than anticipated given that 75 Street/Wayne Gretzky Drive provides the main north-south access on the east side of the city. However the low usage is influenced by the existing truck restriction on a short section in the middle of the corridor.

Results indicate the most frequently transported good was non-metallic minerals such as gravel, soil and glass, followed by fabricated metal products such as metal pipes and beams. Fifty-four percent of the trucks carry materials such as chemicals, fuel petroleum and construction materials, indicating that Edmonton's roads are also important to the oil, gas and construction industries. Only 4.3% of those surveyed were transporting one or more dangerous good. The types and distribution of goods being transported are illustrated in Figure 7. The results are consistent with Edmonton's position as a transportation hub for construction and heavy industry and validates results of previous truck studies.

Figure 7: Commodities Carried by Trucks

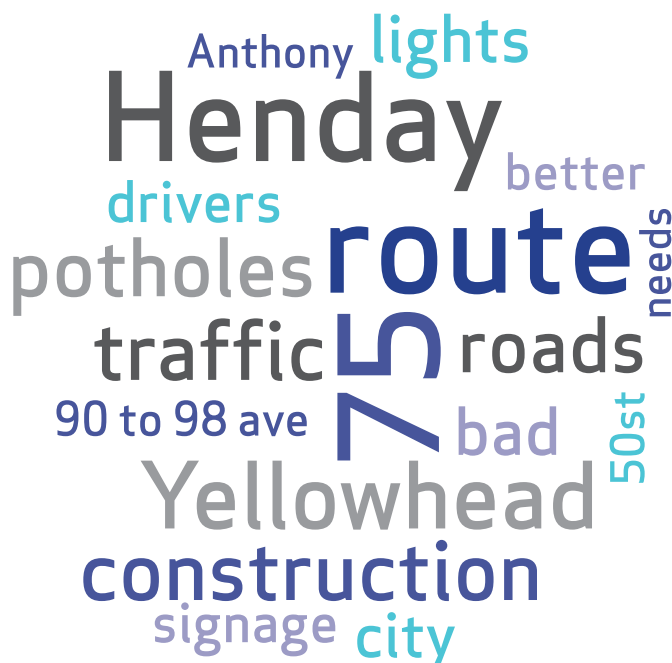


## 4.0 IDENTIFYING OPPORTUNITIES AND CHALLENGES

Although efficient and safe goods movement primarily affects businesses and the trucking industry, ultimately communities and neighbouring municipalities can benefit from and be impacted by goods movement in Edmonton. As a result, development of the *Strategy* benefited from the perspectives of all of these stakeholder groups.

**Truckers and carriers** are the primary users of the goods movement network and are well positioned to provide information on the challenges and opportunities in the network. The efficiency of the network impacts businesses financially - their planning horizons are short and profit driven. Their perspective is important to better understanding which improvements to the network are most impactful for their business.

Figure 8: This word cloud graphically presents the key areas of concern experienced by truck drivers obtained during the 2012 roadside truck survey



**Communities** – Edmonton’s neighbourhoods are impacted by the movement of goods but also benefit from the efficient and timely delivery of goods around our city. The perspective of the community is valuable in identifying the benefits and challenges that come with being in close proximity to truck routes. Impacts to communities from trucks typically include neighbourhood infiltration (short-cutting), noise, pollution and vibration.

**Neighbouring municipalities** in the region are impacted by the decisions that are made by the City of Edmonton as we know that regional goods movement travel that is generated by industrial development outside the city is an important part of the travel through the city. Engaging municipalities will ensure that government agencies have a coordinated approach to support economic growth.

For these reasons, it was important to include all of these perspectives in the development of this strategy.



## 4.1 Stakeholder Consultation

In order to understand the current challenges and opportunities facing goods movement in Edmonton, the City undertook an extensive stakeholder consultation. City staff along with representatives from regional municipalities, industry and community were invited to provide their insights in a variety of ways. Engagement activities included:

- Scoping interviews involved one-on-one conversations with people representing different aspects of goods movement including city administrators, trucking companies and industry associations.
- Industry and community workshops provided an excellent opportunity for discussion and were particularly successful in allowing stakeholders from a variety of backgrounds to hear varying perspectives. The last workshop was unique in that it brought together industry and community members in a forum to discuss the development of the Strategic Actions and was particularly successful in allowing both the participants and City administration to hear and learn from the valuable discussions that took place. Workshops held included:
  - » April 10 Industry consultation workshop (39 participants)
  - » May 2 Community consultation workshop (20 participants)
  - » June 10 Combined industry and community workshop (25 participants)

Comments from participant evaluation forms as well as verbal comments to facilitators indicated that the multi-faceted engagement was very effective and fruitful. A sum total of 84 participants took part in all of the workshops.

- Roadside truck survey captured feedback from truckers on their experiences driving on Edmonton roadways and the truck route network.
- Truck ride-alongs helped City administration to gain a first hand view from the road and to understand the day to day issues experienced by the truckers themselves.

Figure 9: Scoping Interview Participants



The workshop revealed several real examples of community and industry hearing each other, leading to positive results.

“We had a great conversation. Helped increase the understanding”

*Industry Representative,  
Joint Industry-Community Consultation*

Participants from all stakeholder groups demonstrated a keen interest in the development of a goods movement strategy for Edmonton. There was general agreement that the strategy should include a regional context and that collaboration and long term planning with the regional municipalities and particularly the Province was very important. There was acknowledgment that both businesses and residents do benefit from an effective goods movement system, if not directly then as a result of

the strength of the region's economy as a whole. In addition to being a productive and positive forum for discussion and learning, the consultation process demonstrated the desire for stakeholders to work together. The product of the consultation was the formulation of themes around opportunities and challenges for goods movement in Edmonton. Table 1 below outlines the broad themes that emerged from the consultation.

Table 1: Stakeholder Consultation Main Themes

OPPORTUNITIES	CHALLENGES
Construction of Anthony Henday Drive	Availability of direct routes
Edmonton's success in getting goods to market	Traffic flow on Inner Ring Road, particularly Yellowhead Trail
Economic prosperity	Roadway maintenance
City-led consultations provide opportunity to hear a variety of perspectives and be heard	Community impacts
	Regional coordination
	Planning for over-sized loads
	Land use planning
	Regional, long-term planning approaches
	Public awareness and education
	Real-time communication
	Data gathering and sharing

Figure 10: Industry, community and municipal consultation workshops April to June, 2013

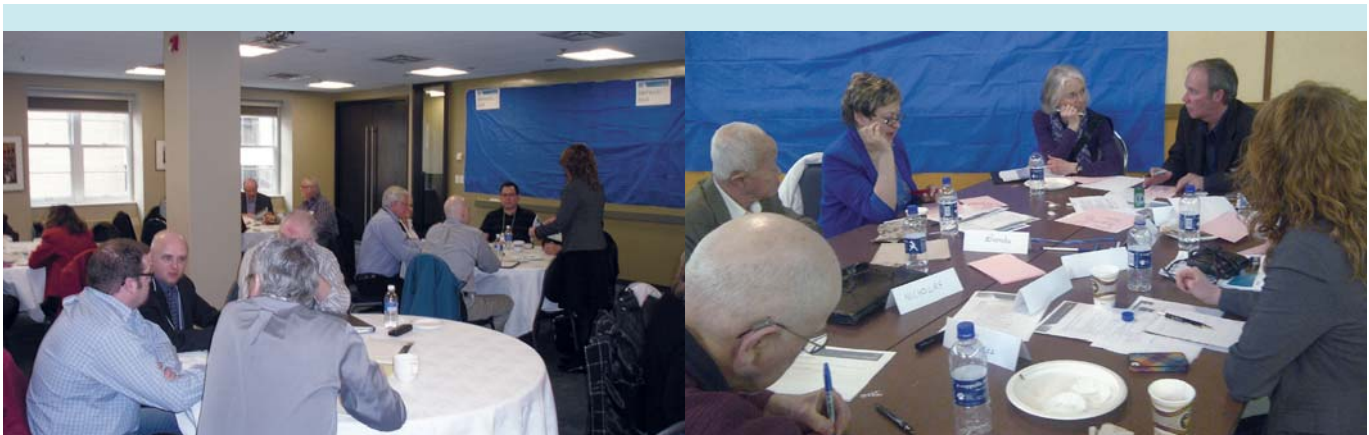


Photo credit: Cam Wakefield

Photo credit: Tammy Gartner



## 4.2 Issues in Other Jurisdictions

In Edmonton, as in other Canadian and American cities, goods movement is an important economic driver and has both positive and negative implications for quality of life. An environmental scan of challenges and solutions found in other jurisdictions uncovered a number of similar themes as well as best practices. The scan helped in gaining a better understanding of the challenges facing goods movement in other cities and regions, and validated and strengthened what we heard about the issues facing Edmonton. Some of the common challenges from cities in Canada and the United States include:

- Challenges with mitigating the impacts of trucks on communities and neighbourhoods
- Lack of long-term funding for infrastructure projects that support goods movement
- Need for improved advocacy for the importance and benefits of goods movement to society
- Need for forums or roundtables with representatives from industry, government and academia
- Need for goods movement data collection and coordination
- Industry frustration with lack of regulatory coordination between various levels of government and authorities including inconsistent truck routes between adjoining jurisdictions
- Gaps in truck routes on goods movement network

Appendix C provides a summary of some goods movement solutions that have been implemented with positive results in other jurisdictions or are planned as part of existing strategies. These solutions also contributed to and informed the development of the *Edmonton Goods Movement Strategy*.

From the peer review it is clear that there is no one action that will deliver meaningful goods movement improvements. Rather it is the implementation of a combination of short, medium and long-term actions delivered in a coordinated manner in cooperation with regional, community and industry partners that will deliver positive results.

- 
- Incentives for less carbon-intensive operations
  - Incentivizing sustainable, freight appropriate and use and development decisions
  - Shifting traffic away from congested facilities
  - Centralized goods movement leadership
  - Exploring public private partnerships to implement freight improvements
  - The need for a broad national strategy to guide provincial and local strategies
  - Encouraging increased use of rail to help ease heavy traffic on key routes

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*Emerging needs identified in other jurisdictions for future consideration*

## 5.0 STRATEGY OBJECTIVES AND ACTIONS

The development of the *Goods Movement Strategy* was driven primarily by the results of an extensive stakeholder consultation, and was also informed by several important pieces including *The Way We Move* strategic objectives, *Edmonton Roadside Truck Survey* results and an environmental scan of best practices. Guided by the information gathered from all of these

areas, a set of seven **Strategic Objectives** supported by thirty-five **Strategic Actions** was developed. Strategic Objectives are those broader goals we aim to achieve through the implementation of the strategy. The Strategic Actions are the steps that we will need to take to achieve the objectives.

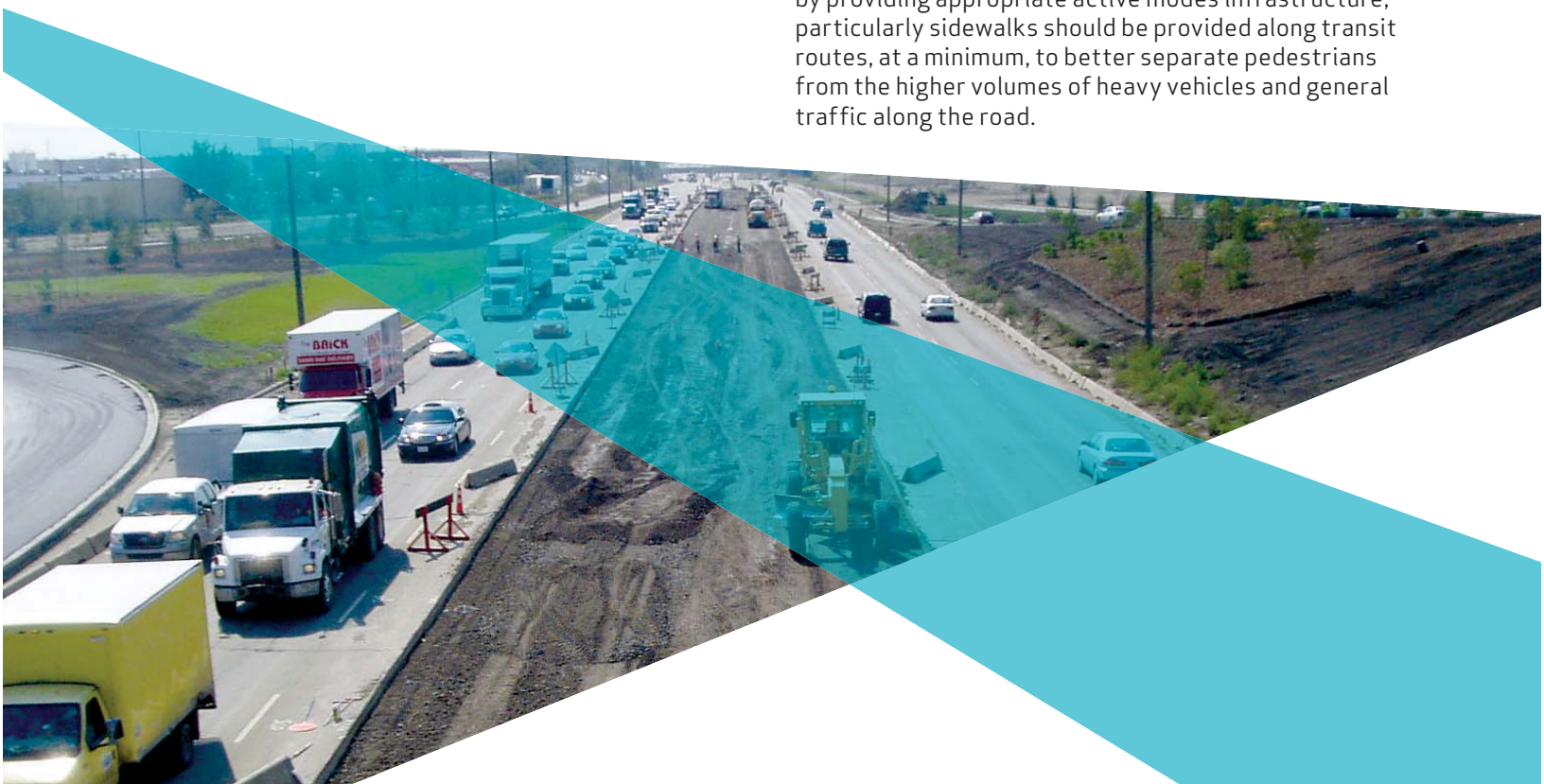
### 5.1 Strategy Objectives

#### Objective 1. Improve roadway operations and maintenance practices

Roadway operations and maintenance are the backbone of an efficient and safe goods movement network. Everything from well-coordinated traffic signals to prompt snow plowing and pothole repair on Key Goods Movement corridors contribute to a well-functioning roadway network for goods movement. Reviewing, prioritizing and making improvements to the maintenance and operations of the most important goods movement roadway facilities will have an immediate impact on the efficiency of the movement of goods for the city and the region as a whole.

#### Objective 2. Mitigate community, environmental and safety impacts

We all benefit from goods movement through the reliable delivery of goods to market, job creation and the improved quality of life that comes with a vibrant economy. The City also recognizes that goods movement has inherent impacts on our communities and environment. Although these impacts cannot all be eliminated, the City, industry and communities can work together to mitigate the impacts from goods movement such as neighbourhood short-cutting, safety, noise, vibration and pollution. The City can also support the safety and health of those employed in industrial areas by providing appropriate active modes infrastructure; particularly sidewalks should be provided along transit routes, at a minimum, to better separate pedestrians from the higher volumes of heavy vehicles and general traffic along the road.



**Objective 3. Increase transportation network efficiency**

Efficiency and reliability are the most important features of a goods movement network. The results of the roadside truck survey revealed the trends in truck movements in the city as being predominantly between the major industrial areas within the city as well as between the city and the region and beyond. Using current data on truck movements and trends helps to prioritize needed improvements to the transportation network. In addition, by implementing existing road facility strategies and completing the plan, design and construction of grade separations for high priority railway crossings, efficiencies to the truck route network can be achieved.

**Objective 4. Improve network planning and forecasting**

Based on the future growth statistics in the transportation and logistics industry, we know that there will be a continued need to improve and meet the expanding needs and demands for goods movement in Edmonton and the region. To meet this demand we will need to continue to collect data, cooperate with regional partners on key goods movement corridors, implement existing and new planning strategies and explore innovative ideas to decrease truck movements within the city.

**Objective 5. Improve regional and regulatory coordination, communication and advocacy**

Edmonton is the largest urban centre within the Edmonton region, making it the centre of complex issues that require a regional perspective. Working within existing bodies, building on current partnerships and creating new forums for discussion are all means of achieving greater regional coordination and ultimately a more efficient goods movement network. In particular, the Capital Region Board is a provincially legislated decision-making body that can serve as an effective forum to coordinate and communicate on goods movement issues that impact the region.

**Objective 6. Improve on-road communication and way-finding for truck drivers**

Communicating effectively with truck drivers on the road is an important element in an efficient truck route network. Providing real-time information on incidents and construction and suggesting alternative routes appropriate for trucks, enables truck drivers to make time-saving decisions. This ultimately affects the bottom line for businesses and helps to make Edmonton a more attractive place to operate. Facilitating this is the fact that technology has changed, making it possible to disseminate information nearly instantaneously and via a variety of media.

**Objective 7. Explore funding mechanisms to implement network improvements**

An important factor in implementing an efficient goods movement network is building the infrastructure needed to satisfy the demand. Large infrastructure projects are often funding-intensive and require long-term funding commitments to fully implement. A review of existing funding arrangements is important to determine if adjustments are needed over time and to assess their effectiveness. In addition, funding programs from other orders of government should be explored.

## 5.2 Strategic Actions

Like the Strategic Objectives, the Strategic Actions were driven largely by what community and industry stakeholders had to say. These are the steps that will need to be taken to achieve our overall strategy objectives. During a stakeholder workshop, participants were asked to provide their insights into the types of the actions that would best help to achieve the goals of the strategy. The actions were themed and a review was conducted of existing policies and plans that supported the suggested actions.

The Strategic Actions are intended to achieve the purpose of the strategy, helping to guide and focus decisions around areas that most need improvement and build on the strengths of the existing system. Table 2 on the following pages outlines the Strategic Actions. The order and numbering of the actions does not imply any priority or timeline.

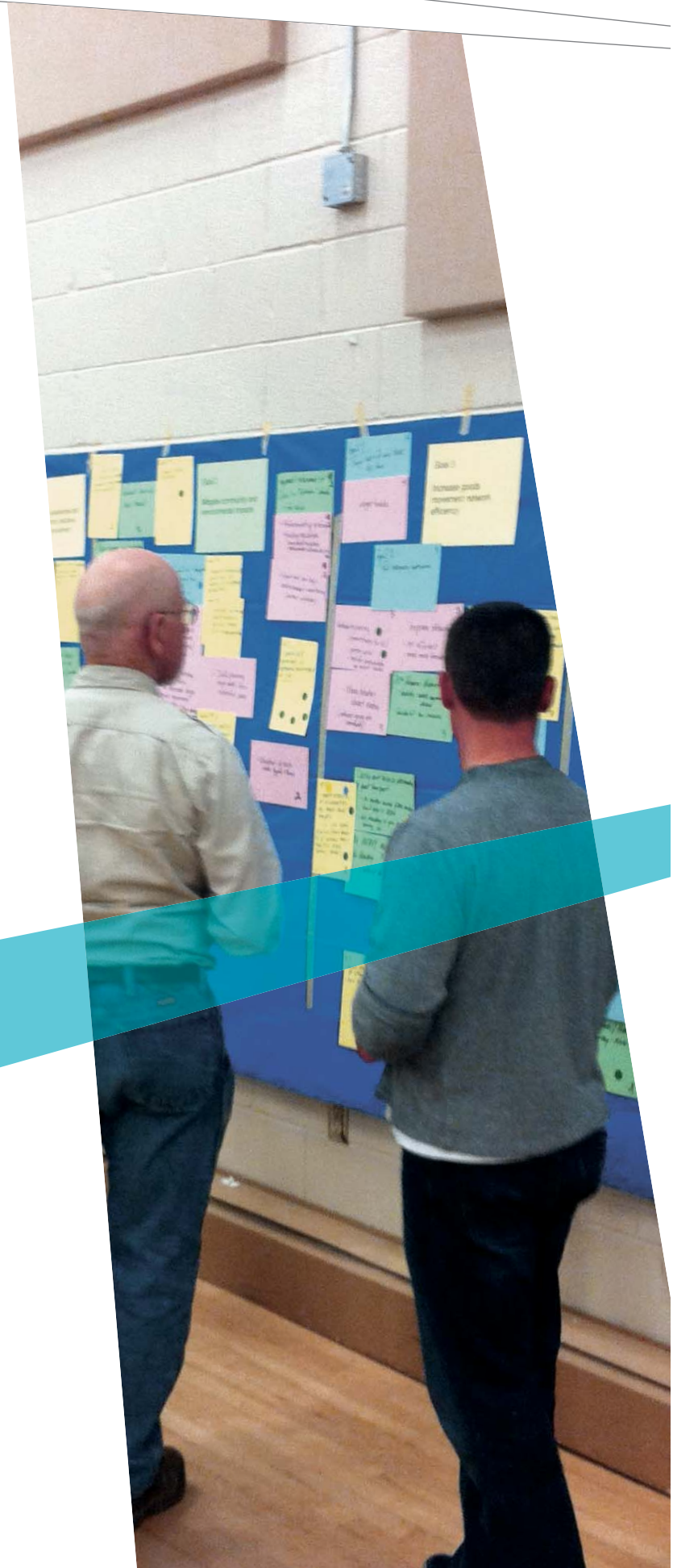




Table 2: Goods Movement Strategic Actions

STRATEGY OBJECTIVE	STRATEGIC ACTIONS
<p><b>Objective 1</b></p> <p>Improve roadway operations and maintenance practices</p>	<ol style="list-style-type: none"> <li>1. Identify and prioritize projects to maintain or improve level of service on Key Goods Movement corridors for which the City is responsible</li> <li>2. Improve efficiency on Key Goods Movement corridors by optimizing traffic operations and signals so as to minimize delays</li> <li>3. Prioritize winter maintenance along Key Goods Movement corridors</li> <li>4. Secure annual funding to achieve risk-based infrastructure management system (RIMS) targets for roadway rehabilitation projects on Key Goods Movement corridors and investigate emerging pavement materials and technology as part of the long-term arterial roadway rehabilitation strategy</li> </ol>
<p><b>Objective 2</b></p> <p>Mitigate community, environmental and safety impacts</p>	<ol style="list-style-type: none"> <li>5. Use the <i>Involving Edmonton Framework</i> to involve the community where changes to truck routes and dangerous goods routes are planned adjacent to residential areas</li> <li>6. Advocate for fuel efficiency and emissions testing, and mechanical inspections on heavy vehicles by the Province</li> <li>7. Recognize the importance of goods movement, and in particular Key Goods Movement corridors, when implementing the <i>Complete Streets Guidelines</i></li> <li>8. Implement the <i>Urban Traffic Noise Policy</i>, <i>Low Impact Development Guidelines</i> and <i>Wildlife Passage Guidelines</i> to mitigate the impacts of existing and new truck routes</li> <li>9. Improve the enforcement of truck route bylaws by implementing a Peace Office Truck Unit, cooperate with Edmonton Police Service to increase commercial vehicle safety inspections, and work with industry to increase compliance with bylaws and regulations</li> <li>10. Increase safety and reduce conflict between goods movement vehicles, pedestrians and cyclists in industrial neighbourhoods by implementing <i>Ped Connections</i>, the strategy for sidewalk infrastructure, and the <i>Bicycle Transportation Plan</i></li> <li>11. Improve communication to identify and address risk during mitigation, preparedness, response and recovery by the City of Edmonton's Emergency Services and railway carriers in relation to dangerous goods transported by rail and along dangerous goods routes</li> </ol>
<p><b>Objective 3</b></p> <p>Increase transportation network efficiency</p>	<ol style="list-style-type: none"> <li>12. Review and update the <i>Edmonton Truck Route Map</i>, including roads of regional significance, for truck route connectivity, capacity, gaps, network redundancy (to accommodate incidents or emergencies) and relevant regulations in the <i>City of Edmonton Traffic Bylaw</i>. Identify and implement improvements with consideration given to pedestrians, cyclists and neighbourhood impacts</li> <li>13. Identify the need for high load corridors. Build high load considerations into land use and transportation planning that is coordinated with regional high load corridor planning initiatives</li> <li>14. Working with the Province, prioritize funding for missing connections from industrial areas to Anthony Henday Drive and for upgrades to existing connections to accommodate growth</li> <li>15. Working with the Province, complete ongoing level of service reviews and upgrades to Anthony Henday Drive to ensure a high service level for goods movement is provided and maintained</li> <li>16. Implement the <i>Yellowhead Trail Strategic Plan</i> with continued monitoring of operations and staged implementation of improvements as outlined in the <i>Yellowhead Trail Strategic Plan</i></li> <li>17. Plan, design and construct grade separations at high priority railway crossing locations, in cooperation with the Province and Federal governments</li> <li>18. Implement the <i>Capital City Downtown Plan Policy 14.5</i> concerning efficient service delivery which calls for "establishing design standards for loading areas and waste storage and pickup facilities in the Downtown and implementing designs for these downtown alleys to carefully integrate pedestrian-oriented functions with vehicle functions." Implement <i>Policy 14.6</i> to "provide a safe, cost effective and efficient truck route system that facilitates the movement of goods and services to, from and within the Downtown and through the region"</li> </ol>

STRATEGY OBJECTIVE	STRATEGIC ACTIONS
<p><b>Objective 4</b></p> <p>Improve network planning and forecasting</p>	<ol style="list-style-type: none"> <li>19. Working with the Province and the Capital Region Board, improve roads of regional significance and Key Goods Movement Corridors</li> <li>20. Implement a program for goods movement data collection, taking consideration of the use of electronic data-gathering technologies and industry GPS data</li> <li>21. Implement the <i>Industrial Land Strategy</i> and support efforts to cluster similar industrial land uses at the Industrial Area Structure Plan level, in support of <i>The Way We Prosper Plan</i></li> <li>22. Working with businesses and property owners, facilitate the planning, development and redevelopment of industrial properties as per the <i>City of Edmonton Industrial Land Use Strategy Key Element 2B</i> and consider impacts to residential areas during redevelopment</li> <li>23. Develop a truck route map for establishing areas, including future industrial developments, to facilitate integrated transportation and land use planning</li> <li>24. Complete a functional planning study for the 75 Street/Wayne Gretzky Drive corridor between Whitemud Drive and Yellowhead Trail</li> <li>25. Together with industry and the Province, investigate the feasibility of building consolidation centres (facilities where all freight destined to or originating from an urban area is consolidated for more efficient delivery) at strategic locations to limit truck movements within the city</li> </ol>
<p><b>Objective 5</b></p> <p>Improve regional and regulatory coordination, communication and advocacy</p>	<ol style="list-style-type: none"> <li>26. Harmonize truck route maps and create a central permit application system in cooperation with Alberta Transportation and neighbouring regional municipalities to improve regional goods movement</li> <li>27. Create a Goods Movement Task Force comprised of representatives from the City of Edmonton, provincial and regional partners, Port Alberta, industry, rail and air authorities and communities to implement improvements for goods movement</li> <li>28. In partnership with others, create public education initiatives, including a social marketing campaign, that promote safe driving habits when sharing the road with trucks</li> </ol>
<p><b>Objective 6</b></p> <p>Improve on-road communication and way-finding for truck drivers</p>	<ol style="list-style-type: none"> <li>29. Implement a regional traveller information system in cooperation with provincial and regional partners that supports industry needs and includes web-based truck route mapping, as well as on-road and on-line information with links to incident and construction notifications</li> <li>30. Develop a transportation systems management strategy to coordinate the delivery of technology-based tools including Intelligent Transportation Systems in support of Key Goods Movement corridors with regional considerations</li> <li>31. Review and improve truck route and height restriction sign placement to ensure sufficient time allowance for drivers to make alternate route choices</li> <li>32. Collaborate with leaders in industry and academia to identify an on-road electronic communication project alerting truck drivers of road restrictions or closure</li> </ol>
<p><b>Objective 7</b></p> <p>Explore funding mechanisms to implement network improvements</p>	<ol style="list-style-type: none"> <li>33. Review the Arterial Roadway Assessment processes for industrial areas to explore ways of accelerating the building of new roads in growth industrial areas</li> <li>34. Monitor funding programs and new opportunities from other orders of government that focus on improving goods movement as part of economic development, trade and commerce and explore public private partnerships for major transportation infrastructure projects</li> <li>35. Continue to coordinate with the Capital Region Board and Alberta Transportation on regional infrastructure spending and priorities</li> </ol>

## 6.0 IMPLEMENTATION – WHAT’S NEXT

The *Edmonton Goods Movement Strategy* contains a good balance of actions with most implementable using existing resources, some requiring new or improved partnerships with other levels of government, industry and community and the remainder requiring long-term capital investment to accomplish. Table 3 below outlines the Strategic Action categories and the estimated investments needed.

Table 3: Implementation Categories and Estimated Investments

CATEGORY	CATEGORY DESCRIPTION & STRATEGIC ACTIONS	RESOURCES	POTENTIAL EXTERNAL PARTNERS	TIMEFRAME
A	<p>Review and enhancement of City of Edmonton practices to improve goods movement</p> <p>Strategic Actions:</p> <ul style="list-style-type: none"> <li>• 1.1, 1.2, 1.3</li> <li>• 2.5, 2.7, 2.8, 2.11</li> <li>• 3.12, 3.13, 3.15, 3.18</li> <li>• 4.20 to 4.23</li> <li>• 5.26</li> <li>• 6.31, 6.32</li> <li>• 7.33, 7.34, 7.35</li> </ul>	<p>Within base budget</p>	<p>None required</p>	<p>0 to 5 years</p>
B	<p>Develop or build on existing partnerships and cooperate to improve goods movement led by Goods Movement Task Force</p> <p>Strategic Actions:</p> <ul style="list-style-type: none"> <li>• 2.6, 2.9, 4.25, 5.27, 5.28, 6.29</li> </ul>	<p>Estimated operating and consulting of \$1.5M over 10 years</p> <p>0.5 FTE - City resource for the task force</p>	<ul style="list-style-type: none"> <li>• Province</li> <li>• Capital Region Board</li> <li>• Edmonton Police Service</li> <li>• Alberta Motor Association</li> <li>• Regional municipalities</li> <li>• Industry &amp; associations</li> <li>• Community groups</li> </ul>	<p>0 to 10 years</p>
C	<p>Introduce capital investments to improve goods movement</p> <p>Strategic Actions:</p> <ul style="list-style-type: none"> <li>• 1.4, 2.10, 3.14, 3.16, 3.17, 4.19, 4.24, 6.30</li> </ul>	<p>Estimated capital infrastructure investments of \$1.8B over 10 years</p>	<ul style="list-style-type: none"> <li>• Provincial and federal governments</li> </ul>	<p>10+ years</p>

## 6.1 Goods Movement Task Force – A Mechanism for Implementation

A key next step is to develop a mechanism for implementing the Strategic Actions. This is particularly important for those actions that require cooperation with other levels of governments or the private sector or for capital infrastructure projects. Many cities have used a goods movement task force for this purpose. Led by the City of Edmonton, the task force would include industry, other governmental representatives and community, with a working committee to research and advance some of the specific actions. Experience shows that cities with a strategy on goods movement, championed both politically and by industry, elevates the profile of goods movement and advances common goals.

As mentioned, many of the Strategic Actions identified in this Strategy are initiatives and programs that the City is currently implementing. A first step would be a review of practices through a goods movement lens with a view of improving and enhancing the movement of goods through the city and connections with the region. The task force would be charged with identifying and building appropriate partnerships and setting the timelines for completion of the Strategic Actions. Decisions of the task force would be made by consensus, setting priorities that work for the common benefit. It would also develop the performance measures and evaluation criteria for implementing the *Goods Movement Strategy*, providing a tangible means to evaluate our progress towards achieving the Strategic Objectives and overall implementation of the Strategy. Specific tasks that would be completed by the task force include:

- Complete background research in relation to initiatives and projects,
- Champion key infrastructure priorities that would advance the implementation of the *Edmonton Goods Movement Strategy*,
- Explore partnerships and cooperation with regional, provincial and federal levels of government to achieve successful implementation of initiatives and projects,
- Promote awareness through special presentations by industry experts to educate and build relationships.

The benefits that will flow from the implementation of the *Edmonton Goods Movement Strategy* through the work of the goods movement task force will have positive impacts on the efficiency and safety of goods movement throughout the Edmonton region. The economic benefits that will result will also be significant and will help to move Edmonton forward in achieving the City's economic and financial goals.

Strong support and championing of the *Edmonton Goods Movement Strategy* by City of Edmonton administration and Council, Alberta Transportation, regional municipalities, industry, carriers and community will be fundamental to the successful implementation of the strategy.





## ACKNOWLEDGEMENTS

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We would like to thank all of the stakeholders, citizens, industry members and municipal representatives who gave their time and insights for the development of this strategy.

We would also like to thank David Kriger of *David Kriger Consultants Inc.* for his advice and guidance offered throughout the development and analysis of the truck survey as well as the strategy document.

Thanks also to Transportation Planning Public Engagement Team and Jacqueline Schimpf and Tammy Gartner of *Jacqueline Schimpf Communications* for their planning and delivery of the stakeholder engagement workshops.

## GLOSSARY

<b>Accessibility</b>	The ease of access to goods, services, activities, buildings and destinations.
<b>Alberta's Industrial Heartland</b>	Canada's largest hydrocarbon processing region with several chemical, petrochemical, oil, and gas operations. Alberta Industrial Heartland is located in the City of Edmonton, Strathcona County, the City of Fort Saskatchewan, Sturgeon County and Lamont County.
<b>Arterial Roads</b>	Intended to carry large volumes of traffic between areas ("through" traffic) with fewer access opportunities to adjacent developments and are defined by the Transportation System Bylaw.
<b>Capital Region Board</b>	A decision-making body made up of 25 municipalities: Edmonton, Beaumont, Bon Accord, Bruderheim, Calmar, Devon, Fort Saskatchewan, Gibbons, Lamont, Lamont County, Leduc, Leduc County, Legal, Morinville, New Sarepta, Parkland County, Redwater, St. Albert, Spruce Grove, Stony Plain, Strathcona County, Sturgeon County, Thorsby, Wabamun and Warburg. The Board's mandate is to create a comprehensive plan to manage regional growth: the "Capital Region Growth Plan."
<b>Commercial Vehicle</b>	A vehicle operated on a highway by or on behalf of a person for the purpose of providing transportation but does not include a private passenger vehicle.
<b>Community</b>	The human and social activity of a neighbourhood, district or city as a whole.
<b>Complete Streets</b>	Streets designed to enable safe and efficient access for people using a variety of transportation modes (automobile, truck, transit, walking, wheelchair, jogging, cycling) and for users with varying levels of physical and cognitive abilities.
<b>Corporate Strategic Goal</b>	A general statement describing a desired end state, ideal, condition or quality to be sought in Edmonton's physical, social or economic development that will help achieve Council's vision and 10 year city-wide strategic goals.
<b>Corporate Strategic Objective</b>	A specific statement of what the corporation (City of Edmonton) needs to accomplish in order to achieve a strategic goal. Objectives should be achievable within the time frame of the plan.
<b>Corporate Strategic Action</b>	A specific statement of how the corporation (City of Edmonton) intends to pursue a strategic objective.
<b>Dangerous Good</b>	A product, substance or organism included by its nature or by the regulations to the <i>Dangerous Goods Transportation and Handling Act</i> in any of the classes listed in Schedule to the <i>Dangerous Goods Transportation and Handling Act</i> .
<b>Dangerous Goods Route</b>	A route which is part of the City's Truck Route system, designated for heavy vehicles carrying specified dangerous goods.
<b>Downtown</b>	The area within the boundaries of the current City of Edmonton Downtown Plan.
<b>Edmonton Energy and Technology Park</b>	Eco-industrial park located in the northeast quadrant of the City of Edmonton and a part of the Alberta Industrial Heartland.
<b>Edmonton region</b>	Encompasses over 1.2 million hectares (close to 12,400 square kilometres) and is home to 1.2 million people.
<b>Goods Movement</b>	The transportation of goods (freight or commodities) by road, rail or air.

<b>Heavy Vehicle (truck)</b>	A vehicle with a maximum gross weight exceeding 8,000 kilograms or a vehicle with a length exceeding 12.5 metres.
<b>High Load Corridor</b>	Roadways that have been identified for the movement of heavy vehicles carrying large loads that require both overweight and overdimensional permits as well as special escorts to travel through the city.
<b>Highway Connectors</b>	Strategically located, higher standard arterial roadways connecting the Inner Ring Loop to the Outer Ring Road and the provincial/national highway system and fall under the Highway Penetrator Agreement.
<b>Inner Ring Road</b>	A network of higher standard arterial roadways intended to cater to cross-town movements within Edmonton city limits, together forming a connected loop within the city (Yellowhead Trail, 75 Street/Wayne Gretzky Drive, Whitemud Drive, 170 Street).
<b>Inter-modal Transportation Facility</b>	A transportation facility where transfers between modes can be made. For instance, freight inter-modal facilities feature a rail yard where containers are transferred between trains and trucks.
<b>Level of Service</b>	An indicator of the quality of operating conditions for the transportation system that may be applied to cycling or walking facilities (to reflect connectivity, convenience and comfort), transit service (to reflect speed, reliability, frequency and passenger comfort) or roadways (to reflect the ratio of vehicle demand to roadway capacity and resultant delay).
<b>Maintenance (of infrastructure)</b>	The set of activities required to keep a component, system, infrastructure asset or facility functioning as it was originally designed and constructed. Maintenance refers to all actions necessary for retaining an asset as near as possible to its original condition, including repair but excluding renewal (rehabilitation or replacement).
<b>Overdimensional</b>	Any vehicle requiring an overdimensional permit as defined in Alberta Regulation 315/2002 the Commercial Vehicle Dimension and Weight Regulation.
<b>Overweight vehicle</b>	Any vehicle requiring an overweight permit as defined in Alberta Regulation 315/2002 the Commercial Vehicle Dimension and Weight Regulation.
<b>Progress Measurement</b>	Monitoring of indicators that enable an understanding of conditions, actions and impacts that describe progress towards key objectives and are used to inform decision making.
<b>Regional Connections</b>	Connections between the transportation systems of the City of Edmonton and the surrounding region.
<b>Shortcutting</b>	Through traffic having no origin or destination within a neighbourhood, usually where drivers perceive a shortcut route as shorter in time or distance than the alternative arterial route.
<b>Transportation and Warehousing Sector</b>	This sector comprises of establishments primarily engaged in transporting passengers and goods, warehousing and storing goods, and providing services to these establishments. The modes of transportation are road (trucking, transit and ground passenger), rail, water, air and pipeline.
<b>Truck Route System</b>	A network of designated roadways that have been designed and constructed to permit and withstand use by heavy vehicles.
<b>Urban Traffic Noise Policy</b>	Thresholds under which daily noise due to vehicular traffic on major transportation facilities is deemed to be acceptable, and above which the policy designates the responsibility for noise attenuation.



## APPENDIX A

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### *The Way We Move* Goods and Services Movement Strategic Objectives and Actions

#### Strategic Objective

- 8.1 The City will work with other jurisdictions, the Province and external service providers to ensure that Edmonton has a safe and efficient goods movement network that connects and interchanges well with other facilities.

#### Strategic Actions

- a. Maintaining a comprehensive network of truck routes, including Dangerous Goods routes, that rely primarily on highways and arterial roadways.
- b. Developing a plan to address efficient goods movement on the Inner ring road.
- c. Protecting the integrity of major goods movement corridors through the encouragement of appropriate land use planning and control of direct access.
- d. Giving priority to road construction projects that enhance goods and services movement and that facilitate access to developing and established business and industrial areas.
- e. Working with rail companies and regulatory agencies to address operational issues and selectively upgrade rail crossings within the city.
- f. Recognizing the importance of rail transportation to the economic health of the Capital region and the importance of incorporating the impact of railways on future land development, roadway planning and traffic growth.
- g. Recognizing the importance of air transportation (for passenger travel and goods and service movements) and multimodal facilities.
- h. Working with agencies planning rail and air facilities to participate in facilitating the effective interchange of goods and services.
- i. Conducting surveys of goods and services movements to understand the travel patterns within the city and region to adequately plan for the needs of the community.
- j. Consulting with industry and the public to resolve goods and services movement issues.
- k. Working with the province to recognize facilities of regional importance within Edmonton and secure funding for their improvement (such as Yellowhead Trail).

## APPENDIX B

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### *The Way We Move* **Strategic Actions in Support of Goods Movement Improvements and Mitigation**

- 7.1 The City will develop a comprehensive program to continually optimize the efficiency of the existing roadway system using traffic management and transportation supply measures.
- 7.3 The City will focus major roadway improvements on the efficient movement of goods, services and transit vehicles.
- 7.5 The City will promote and undertake the safe planning, design and operation of the transportation system.
- 7.6 The City will appropriately mitigate the impacts of the transportation network on existing and future residential communities.
- 9.1 The City will work with neighbouring municipalities as part of the Capital Region Board to facilitate and implement a comprehensive, coordinated and integrated transportation system that supports the city and Capital region's mobility, accessibility and economic vitality.

## APPENDIX C

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### Examples of Goods Movement Strategies or Actions Implemented or Planned in Other Jurisdictions

#### Goods Movement Forum

- Peel Goods Movement Task Force
- Region of Durham Chairman's Roundtable on Goods Movement
- Puget Sound FAST Corridor Partnership and Regional Freight Mobility Roundtable
- Metrolinx Roundtable and Technical Committee
- South Central Pennsylvania Goods Movement Forum

#### Freight Data Collection Programs

- Greater Toronto and Hamilton Area Freight-Related Data Collection Program
- Region of Peel in partnership with Transport Canada, Metrolinx and industry
- South Central Pennsylvania Goods Movement Study recommendation to develop and maintain data and tools to monitor and forecast goods movement
- Auckland Regional Freight Strategy policy action to develop a data acquisition plan for regional freight information

#### Electronic and Web-based Traveller Information

- City of Portland freight mobility webpage
- Peel Region truck map employing GPS, including routes and by-law references
- Durham Goods Movement Strategy recommended action to promote use of technology to reduce drayage, avoid congestion and disseminate information
- New York Regional Freight Plan recommended action to develop a corridor-wide commercial vehicle real time traveller information network

#### Public Education and Advocacy

- City of Portland "Share the Road" public education program
- Durham Region Goods Movement Strategy recommended action to engage and educate public and politicians on importance of integrating goods movement into all network improvement decisions
- Metrolinx Freight Study recommended action to improve and coordinate public outreach on urban freight

#### Strategy for Over-Dimensional Loads

- City of Portland to identify a strategy for truck routes that serve movements of over-dimensional loads
- Recommended action for South Central Pennsylvania Goods Movement Forum to develop over-dimensional trucking restriction maps
- Auckland Regional Freight Strategy policy action to review overweight and over-dimension vehicle control in Auckland

## References for Appendix C Goods Movement Strategies and Studies

Auckland Regional Council, *Auckland Regional Freight Study* (2006)

Cambridge Systematics, *South Central Pennsylvania Regional Goods Movement Study* (November 2006)

City of Portland Office of Transportation, *Freight Master Plan* (May 2010)

Metrolinx, *GTHA Urban Freight Study Final Draft* (February 2011)

New York Metropolitan Transportation Council, *NYMTC Regional Freight Plan—An Element of the Regional Transportation Plan* (June 2004)

Puget Sound Regional Council, *Transportation 2040 Appendix J: Regional Freight Strategy* (May 2010)

Regional Municipality of Peel, *Peel Region Moving into Action: Goods Movement Strategic Plan 2012–2016* (April 2012)

Regional Municipality of Durham, *Good Movement Strategy Appendix M Long Term Transit Strategy* (February 2010)







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